> d his

(FILE 'HOME' ENTERED AT 07:39:55 ON 20 JAN 2004)

FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT
07:40:20 ON 20 JAN 2004

L1 555584 S GLYCOPROTEIN
L2 4677 S ALBUMEN (P) EGG
L3 17366 S WHEY (P) MILK
L4 237 S L1 (P) (L2 OR L3)
L5 98254 S (HELICOBACTER PYLORI) OR (H. PYLORI)
L6 9072 S UREASE (P) L5
L7 1 S L4 (P) L6
L8 3915 S L5 (P) COLONIZATION
L9 597 S L8 (P) INHIBIT?
L10 1 S L4 (P) L9
L11 0 S L10 NOT L7
L12 40948 S GASTROINTESTINAL DISEASE
L13 0 S L12 (P) L4
L14 186 S (HIGH MOLECULAR WEIGHT) (P) WHEY
L15 24 S (HIGH MOLECULAR WEIGHT) (P) ALBUMEN
L16 19 S (L14 OR L15) (P) L1
L17 0 S L16 (P) L6
L18 3393 S KODAMA Y?/AU
L19 4890 S KIMURA N?/AU
L20 1 S (L18 OR L19) AND L4
L21 0 S L20 NOT L10
L22 29 S (L18 OR L19) AND L6
L23 6 S L22 AND L1
L24 2 DUPLICATE REMOVE L23 (4 DUPLICATES REMOVED)
L25 1 S L24 NOT L10

=> log y

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FILE 'HOME' ENTERED AT 07:39:55 ON 20 JAN 2004

=> file medline caplus biosis embase scisearch agricola
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                     0.21       0.21

FILE 'MEDLINE' ENTERED AT 07:40:20 ON 20 JAN 2004

FILE 'CAPLUS' ENTERED AT 07:40:20 ON 20 JAN 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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FILE 'BIOSIS' ENTERED AT 07:40:20 ON 20 JAN 2004
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FILE 'EMBASE' ENTERED AT 07:40:20 ON 20 JAN 2004
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FILE 'SCISEARCH' ENTERED AT 07:40:20 ON 20 JAN 2004
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FILE 'AGRICOLA' ENTERED AT 07:40:20 ON 20 JAN 2004

=> s glycoprotein
L1      555584 GLYCOPROTEIN

=> s albumen (p) egg
L2        4677 ALBUMEN (P) EGG

=> s whey (P) milk
L3       17366 WHEY (P) MILK

=> s l1 (p) (l2 or l3)
L4         237 L1 (P) (L2 OR L3)

=> s (helicobacter pylori) or (H. pylori)
L5       98254 (HELICOBACTER PYLORI) OR (H. PYLORI)

=> s urease (p) l5
L6        9072 UREASE (P) L5

=> s l4 (p) l6
L7           1 L4 (P) L6

=> d l7 1 ibib abs

L7   ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER:         2001:760034  CAPLUS
DOCUMENT NUMBER:          135:278059
TITLE:                    Glycoprotein having inhibitory activity against
                          Helicobacter pylori colonization
INVENTOR(S):              Kodama, Yoshikatsu; Kimura, Nobutake
PATENT ASSIGNEE(S):       Ghen Corporation, Japan; Nisshin Flour Milling Co.,
                          Ltd.
SOURCE:                   Eur. Pat. Appl., 16 pp.
                          CODEN: EPXXDW
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.        KIND  DATE           APPLICATION NO.   DATE
     ---------------   ----  --------       ---------------   --------
     EP 1145644         A2   20011017       EP 2001-400969    20010413
     EP 1145644         A3   20020612
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO
     JP 2001294600      A2   20011023       JP 2000-113913    20000414
     CA 2344183         AA   20011014       CA 2001-2344183   20010412
     US 2001044120      A1   20011122       US 2001-833637    20010413
     CN 1331250         A    20020116       CN 2001-123320    20010413
PRIORITY APPLN. INFO.:                   JP 2000-113913   A  20000414
AB   An inhibitor of   ***Helicobacter***     ***pylori***   colonization in
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which specifically binds to ***H*** . ***pylori*** ***urease*** . This ***glycoprotein*** is isolated and purified from a ***glycoprotein*** -contg. substance, esp. that derived from bovine ***milk*** ***whey*** or ***albumen*** of chicken ***eggs*** by affinity chromatog. using a column on which ***H*** . ***pylori*** ***urease*** is immobilized. The ***glycoprotein*** is able to effectively inhibit ***H*** . ***pylori*** colonization, and thus is useful for the prevention or treatment of diseases caused by infection of ***H*** . ***pylori*** such as peptic ulcers. A food and medicament comprising the inhibitor are also provided.

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=> d his

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     FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT
     07:40:20 ON 20 JAN 2004
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L4           237 S L1 (P) (L2 OR L3)
L5         98254 S (HELICOBACTER PYLORI) OR (H. PYLORI)
L6          9072 S UREASE (P) L5
L7             1 S L4 (P) L6

=> s l5 (p) colonization
L8          3915 L5 (P) COLONIZATION

=> s l8 (p) inhibit?
L9           597 L8 (P) INHIBIT?

=> s l4 (p) l9
L10            1 L4 (P) L9

=> s l10 not l7
L11            0 L10 NOT L7

=> s gastrointestinal disease
L12        40948 GASTROINTESTINAL DISEASE

=> s l12 (p) l4
L13            0 L12 (P) L4

=> s (high molecular weight) (p) whey
L14          186 (HIGH MOLECULAR WEIGHT) (P) WHEY

=> s (high molecular weight) (p) albumen
L15           24 (HIGH MOLECULAR WEIGHT) (P) ALBUMEN

=> s (l14 or l15) (p) l1
L16           19 (L14 OR L15) (P) L1

=> s l16 (p) l6
L17            0 L16 (P) L6

=> s kodama y?/au
L18         3393 KODAMA Y?/AU

=> s kimura n?/au
L19         4890 KIMURA N?/AU

=> s (l18 or l19) and l4
L20            1 (L18 OR L19) AND L4

=> s l20 not l10
L21            0 L20 NOT L10

=> s (l18 or l19) and l6
L22           29 (L18 OR L19) AND L6

=> s l22 and l1
L23            6 L22 AND L1

=> duplicate remove l23
DUPLICATE PREFERENCE IS 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH'
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PROCESSING COMPLETED FOR L23
L24           2 DUPLICATE REMOVE L23 (4 DUPLICATES REMOVED)

=> s l24 not l10
L25           1 L24 NOT L10

=> d l25 1 ibib abs

L25  ANSWER 1 OF 1     MEDLINE on STN
ACCESSION NUMBER:    2000403971     MEDLINE
DOCUMENT NUMBER:     20389972   PubMed ID: 10930371
TITLE:               Acid-dependent adherence of   ***Helicobacter***
                       ***pylori***     ***urease***   to diverse polysaccharides.
AUTHOR:              Icatlo F C; Goshima H;   ***Kimura N***  ;   ***Kodama Y***
CORPORATE SOURCE:    Immunology Research Institute, Ghen Corp., Sano, Gifu City,
                     Japan.. irig@ghen.co.jp
SOURCE:              GASTROENTEROLOGY, (2000 Aug) 119 (2) 358-67.
                     Journal code: 0374630. ISSN: 0016-5085.
PUB. COUNTRY:        United States
DOCUMENT TYPE:       Journal; Article; (JOURNAL ARTICLE)
LANGUAGE:            English
FILE SEGMENT:        Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH:         200008
ENTRY DATE:          Entered STN: 20000901
                     Last Updated on STN: 20000901
                     Entered Medline: 20000822
AB   BACKGROUND & AIMS: The significance of acid-primed recognition of ligands
     by   ***Helicobacter***     ***pylori***     ***urease***   is unknown.
     This study aimed to further characterize the specificity of   ***urease***
     adherence in vitro and verify whether specific inhibition will translate
     into in vivo suppression of colonization.  METHODS: A highly sensitive
     competitive enzyme-linked ligand capture assay was used to quantify the
     capacity of each test inhibitor to compete with labeled mucin for binding
     sites on immobilized native   ***urease***   .  A model polymer that
     strongly bound   ***urease***   was used in an in vivo trial using
     euthymic hairless mice as an infection model.  RESULTS: The blockage of
       ***urease***  -gastric mucin interaction by certain inhibitors revealed an
     acid-functional lectin-like activity by   ***urease***   , specifically
     recognizing bacterial lipopolysaccharides and certain species of
     polysaccharides, nonbacterial glycolipids, and   ***glycoproteins***   .
     Dextran sulfate significantly (P < 0.01) suppressed colonization of mice
     by   ***H***   .   ***pylori***   when given before and/or after challenge.
     CONCLUSIONS: The acid-driven high-affinity adherence of   ***H***   .
       ***pylori***     ***urease***   to mucin and lipopolysaccharides
     contributes to gastric mucosal colonization by the bacterium based on in
     vivo targeting experiments using specific polysaccharides in a mouse model
     with acute infection.  Acid-functional   ***urease***  -homing
     polysaccharides that can interfere with   ***urease***  -mucin or
       ***H***   .   ***pylori***   whole cell-mucin interaction in vitro can
     significantly interfere with colonization by the bacterium in vivo.


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L17            0 S L16 (P) L6
L18         3393 S KODAMA Y?/AU
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L23             6 S L22 AND L1
L24             2 DUPLICATE REMOVE L23 (4 DUPLICATES REMOVED)
L25             1 S L24 NOT L10

=> log y
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                      ENTRY    SESSION
FULL ESTIMATED COST                                   63.42      63.63

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                      ENTRY    SESSION
CA SUBSCRIBER PRICE                                   -0.69      -0.69

STN INTERNATIONAL LOGOFF AT 07:51:41 ON 20 JAN 2004
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